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TECHNICAL REVIEW COMMENTS ON OPERABLE UNIT 4 (OU4) PILOT PLANT PHASE I TREATABILITY STUDY WORK PLAN, REVISION 0 GENERAL COMMENTS

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COMMENTS

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TECHNICAL REVIEW COMMENTS ON OPERABLE UNIT 4 (OU4) PILOT PLANT PHASE I TREATABILITY STUDY WORK PLAN, REVISION 0

GENERAL COMMENTS

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 1.0 Page #: NA Line #: NA Code:
Original Comment #: G-1

Comment: This treatability study work plan references U.S. EPA guidance on conducting treatability studies (U.S. EPA 1992). Although the work plan includes all major sections identified in the guidance, it lacks specific information and details in several sections. For example, according to the guidance, one of the items Section 1 should provide is a summary of existing waste characteristics from previous laboratory and bench-scale vitrification testing. Without a complete characterization of the untreated waste materials in the OU4 silos, it is difficult to determine the suitability and adequacy of the proposed sampling and analysis procedures for this treatability study. The U.S. Department of Energy (U.S. DOE) should include characterization information for the untreated wastes.

Response: The Feasibility Study/Treatability Studies for vitrification of the OU4 materials are continued in the Phase I and Phase II Work Plans. Phase I of the OU4 Pilot Plant focuses on demonstrating waste retrieval equipment and the Pilot Plant equipment shakedown and startup operations. The Phase II Work Plan focuses on the treatability study. Phase II is the actual continuation of the study at pilot scale levels. Comments received will have responses in the Phase II Work Plan. The OU4 Remedial Investigation (RI Report, dated November 1993) provides a complete characterization of the silo material. This report was submitted to USEPA.

Action: None.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 3.0 Page #: NA Line #: NA Code:
Original Comment #: G-2

Comment: According to U.S. EPA 1992, Section 3 should present the objectives of the treatability study and the treatability study work plan merely presents general performance objectives for three activities--hydraulic mining of silo material, solids dewatering, and vitrification--and only references data quality objectives in Table 3-1. Also, the information for performance and data quality objectives is presented in a confusing manner, where both engineering-related and treatability study-related objectives are combined and presented in no particular order in Table 3-1. The engineering-related objectives should be addressed separately from the treatability study objectives. Also, the treatability study objectives in Table 3-1 do not present performance goals based on either cleanup criteria or levels which protect human health and the environment. U.S. DOE should revise Section 3.0, especially Table 3-1, to address the noted deficiencies and to follow U.S. EPA's 1992 guidance for conducting treatability studies.

Response: The Phase I Work Plan focuses on engineering-related performance goals and it was provided to USEPA for information purposes. Phase I covers systems operation testing with surrogate material to prove operability of system components. It will also identify the operation envelope for the K-65 and Silo 3 residues to be treated as part of the Phase II Work Plan. Phase II is the basis for engineering and process development for the remediation vitrification facility. Phase II operation is the actual continuation of the treatability study of previous formulations, process

control and final engineering designs. The Phase II Work Plan addresses the performance objectives for treatability, protection of human health and the environment and data quality. Performance goals and cleanup criteria/levels concerning human health and the environment are listed in Table 6-2, which reflects the requirements of the potential ARARs and TBC criteria that are listed in Appendix C.

Action: The text of the Work Plan for Phase II addresses these concerns.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 4.0 Page #: NA Line #: NA Code:
Original Comment #: G-3
Comment: According to U.S. EPA 1992 guidance, this section of the treatability study work plan should describe the experimental design of the treatability study. This section, for example, should present the volume of waste material to be tested, the critical parameters to be studied and how they will be varied, and the degree of replication. Instead, this section presents a preliminary engineering design for the individual components of the pilot-scale treatment system, as well as a description of construction and start-up activities. Where certain relevant study parameters such as solids flow rates from the thickener and slurry tanks are mentioned, either a single value or a range of volumes is given for each parameter. No key study parameters are identified and presented in Section 3.0, nor is there a discussion of how these parameters will be varied during the study. U.S. DOE should revise this section to present all the information specified in the U.S. EPA 1992 guidance, especially the critical parameters to be studied and how they will be varied to meet the objectives in the revised Section 3.0, the volumes of waste materials to be tested, and the amount of sampling replication.

Response: The experimental design of the treatability study is addressed in detail in the OU4 Treatability Study Report for Vitrification of Residues from Silos 1, 2 and 3, dated May 1993. The Phase II Work Plan references this document.

Action: The volume of waste material to be tested will be added to the Phase II Work Plan text. (Section 1.3.1)

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 6.0 to 10.0 Page #: NA Line #: NA Code:
Original Comment #: G-4
Comment: These sections state that treatability study activities will be performed in accordance with certain specifically cited plans and documents. For the treatability study work plan to be a usable, stand-alone document, the standard procedures and other relevant portions of the cited documents should either be incorporated directly into, or appended to, the treatability study work plan.

Response: Prior USEPA direction stated that previously approved documents are to be referenced not restated in the work plans. Therefore, in an effort to make the document manageable in size and readability, the subject documents have been referenced only.

Action: None.

SPECIFIC COMMENTS

Commenting Organization: U.S. EPA Commentor: Saric
Section #: NA Page #: viii Line #: 17 Code:
Original Comment #: 1
Comment: The acronym "PCT" is listed but is not defined. This acronym should either be defined or deleted.

Response: "PCT" is listed and defined in the Phase II Work Plan.

Action: Acknowledged - agree. (Page viii)

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 1.3.1 Page #: 1-3 Line #: NA Code:
Original Comment #: 2
Comment: The first paragraph of this subsection states that OU4 personnel are preparing for the third tier of U.S. EPA's approach for conducting treatability studies at Superfund sites. The third tier is the RD/RA treatability study phase conducted after the ROD is signed. Because the final remedy for the Fernald site has not yet been selected and the ROD has not been signed, the work plan should address the issue of the vitrification alternative not being selected in the ROD.

Response: Section 1.3.1 will be revised.

Action: The Phase II Work Plan text has been revised. (Page 1-3, Line 29 and Page 1-4, Line 1)

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 1.4.2 Page #: 1-8 Line #: NA Code:
Original Comment #: 3
Comment: The first paragraph cites a document that is not included in the references. This document should be listed in the reference section of the work plan.

Response: The Phase II Work Plan references this document, OU4 Treatability Study Report for the Vitrification of Residues from Silos 1, 2 and 3.

Action: Acknowledged - agree.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 1.4.3 Page #: 1-13 Line #: NA Code:
Original Comment #: 4
Comment: This subsection states that the optimum formulation of materials for glass formation through vitrification will be based on several factors, including processability, phase stability, and the ability to handle variation in the waste feed composition. It further states that the chosen formulation will be optimized "through a statistically designed series of tests over a wide range of credible waste stream compositions." The text in this subsection should be clarified to explain, for example, how each of the factors will be measured, what comprises the statistically designed series of waste, and what is meant by a wide range of credible waste stream compositions.

Response: Sections 1.4.1 and 1.4.2 provides data and results of the vitrification tests conducted by Battelle's Pacific Northwest Laboratories. Sections 1.4.3, 4.4.1, and 4.4.2 summarize the approach that will be taken for Phase II treatability and how these factors will be measured.

Additional information is provided in the "OU4 Treatability Study Final Report for Vitrification of Residues from Silos 1, 2, and 3, May 1993."

Action: None.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 1.0 Page #: NA Line #: NA Code:
Original Comment #: 5
Comment: See Original General Comment #1. This section should summarize all existing waste characterization data for OU4, including data for treated and untreated waste. This data should be organized by matrix type and include concentrations for key treatability study parameters.

Response: See General Comment Response #1. Untreated waste data is given in Appendix A and treated waste data is addressed in Section 1.4.

Action: None.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 2.0 Page #: NA Line #: NA Code:
Original Comment #: 6
Comment: The work plan would become more useful if a box-type flow diagram of all pilot-scale treatability study components showing input, output, and sidestreams generated as a result of treatment or waste handling were included.

Response: A block flow diagram will be added to supplement the Process Flow Diagram that shows the flow quantities.

Action: A block flow diagram will be included in the Phase II Work Plan. (Section 4.0)

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 2.0 Page #: 2-1 Line #: NA Code:
Original Comment #: 7
Comment: Two documents cited in the first paragraph of this section are not included in the reference section. The work plan should be revised to include these two documents in the reference section.

Response: Acknowledged - agree.

Action: Will add the following two documents to Section 17.0, References: Initial Screening of Alternatives for OU4, Task 12 Report, October 1990, and the OU4 Feasibility Study, February 1994. (Page 17-1)

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 2.3 Page #: 2-5 Line #: NA Code:
Original Comment #: 8
Comment: The subsection entitled "Treatment" discusses waste stabilization and the associated equipment for vitrification; however, similar information is not included for cement stabilization, as described in Alternative 2A, Page 2-3. The missing text discussing cement stabilization equipment should be provided to fully describe this alternative.

Response: Cement stabilization is addressed in detail in the OU4 Feasibility Study, dated February 1994. This is a proven technology that has been applied to the stabilization of a variety of waste materials. This alternative would use the same site preparation, construction, and material

removal as the vitrification alternative. A conceptual design for a cement stabilization facility has been prepared, and no Tier III Treatability Study is deemed to be required. If the selected remedy is cement stabilization, DOE would detail the conceptual design to accommodate this alternative, and go directly into final remediation.

Action: None.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 3.0 Page #: NA Line #: NA Code:
Original Comment #: 9
Comment: See Original General Comment #2. Also, this section discusses data quality objectives (DQO) by referencing the U.S. EPA-approved "Sitewide CERCLA Quality Assurance Project Plan (SCQ)" and by presenting corresponding analytical support levels (ASL) in the text and in Table 3-1. However, to make the work plan more usable as a stand-alone document, the relevant sections of the SCQ should be either directly incorporated into the text or appended to the work plan. Also, the correlation between ASLs and DQOs should be provided for easy reference. Finally, although performance objectives and DQOs/ASLs for engineering-related and site characterization-related activities are important to the overall treatability study, they are not directly associated with the experimental testing and should be included as an appendix to the treatability study work plan instead of being presented in the main text of the plan.

Response: See General Comment Response #2 and #4.

Action: None.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 3.1 Page #: 3-1 Line #: NA Code:
Original Comment #: 10
Comment: The second paragraph states that optimum process parameters for the treatability of K-65 and Silo 3 material will be identified in Phase II. This statement should be clarified to explain why optimum process parameters cannot be identified in Phase I.

Response: Phase I focuses on waste retrieval and equipment startup, not treatability. Optimum process parameters are addressed in Phase II.

Action: None.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 3.2 Page #: 3-1 to 3-3 Line #: NA Code:
Original Comment #: 11
Comment: This subsection mixes engineering-related objectives (Subsections 3.2.1, Silo Dome Modification; 3.2.2, Superstructure; and, 3.2.6, Support Systems) with treatability study objectives. Only treatability study objectives should be presented in the text of the work plan; engineering-related objectives should be appended. Also, the engineering-related objectives are qualitative rather than quantitative. Finally, the treatability study objectives should be correlated with DQOs presented in Table 3-1.

Response: See General Comment Response #2.

Action: None.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 3.2.5 Page #: 3-2 Line #: NA Code:
Original Comment #: 12
Comment: This subsection discusses performance objectives in general terms for vitrification. The text states that about 10 percent (dry weight basis) of additives such as sodium carbonate and trace amounts of metallic elements and sulfates will be added to the dewatered solids before they enter the vitrification furnace. The composition and quantities of the additives and metallic elements should be presented here and in Section 5.0, Equipment and Materials.

Response: This information will be included in the Phase II Work Plan.

Action: The Phase II Work Plan addresses this issue in Section 4.4.2 and Tables 4.1 and 4.2.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 3.3 Page #: 3-3 Line #: NA Code:
Original Comment #: 13
Comment: As mentioned in Original Specific Comment #11, DQOs related to the treatability study should be correlated with performance objectives in Table 3-1 and engineering-related DQOs and performance objectives should be appended rather than discussed in the main text of the work plan. In addition, the second paragraph in this subsection states that the "FEMP Site Characterization organization" will determine if additional soil sampling is required at Silo 4 to characterize this medium for disposal purposes. Unless the treatability study includes treatment of soil removed from around Silo 4, this statement should be included in an appendix to the work plan rather than in the main text. Also, if the FEMP Site Characterization organization has any other responsibilities that directly affect the conduct of the planned treatability study, then this organization should be further discussed in Section 14.0, Management and Staffing.

Response: The treatability study does not include treatment of soil removed from around the Silo 4 area. FERMCO's Waste Management Department issued a letter [M:RSO:(WM):94-0050, CRU4 Pilot Plant Construction Project, dated January 14, 1994] stating that characterization is complete. The FERMCO site characterization organization has no other responsibilities related to the treatability addressed by this Work Plan.

Action: None.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: Table 3-1 Page #: 3-4 Line #: NA Code:
Original Comment #: 14
Comment: This table outlines the sampling and analysis activities for Phase I of the pilot-scale treatability study. This table, however, does not present the information outlined in U.S. EPA's guidance for treatability studies. Based on this table's current organization and information presented, there is not description of test and performance objectives for key study parameters. This deficiency precludes the evaluation of sampling and analytical methods for suitability and adequacy to meet the objectives. Other problems with the table include the following: matrixes to be sampled are referred to as "parameters," key study parameters are not identified or correlated with objectives, sampling procedures are either referenced to other sources or merely identified by type (for example, grab sample), sampling locations are not given, the frequency of sampling and sample preparation, procedures are referenced to other sources or identified as "TBD," analytical methods are not always properly referenced by method source and number, ASLs are not correlated with DQOs, and the number of quality control samples is merely referenced to a method or listed as

"duplicates." These deficiencies need to be corrected. Table 3-1 should also present project-specific information instead of merely referencing an analytical or sampling method, and should closely follow U.S. EPA's 1992 guidance document.

Response: See General Comment Response #2.

Action: None.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 4.0 Page #: NA Line #: NA Code:
Original Comment #: 15

Comment: See Original General Comment #3. As stated previously, engineering- and construction-related data and procedures should be appended instead of being described in the main text of the work plan. Also, Section 4.0 should include the specific step-by-step measuring, monitoring, sampling, and analyzing procedures to be used during the treatability study. These procedures should be standardized and appended to the work plan so that the degree of supervision needed and the number of potential errors that may occur are minimized.

With regard to the engineering design, and operation of the pilot plant, there is almost no discussion of how temperatures, flow rates, and other monitoring data will be collected, or what instruments will be used to monitor and control operating conditions, especially for the vitrification furnace. These deficiencies should be addressed in the revised work plan.

Finally, with regard to Figures 4-1 through 4-3, the image quality is very poor and much of the text is so small that it is illegible. These deficiencies should be corrected in the revised work plan.

Response:
a) Paragraph 1 - See General Comment Response #4.

b) Paragraph 2 - Text will be added to the Phase II Work Plan to address these concerns. Section 6.0 and Tables 6-1 and 6-2 discuss measuring, monitoring, sampling and analyzing.

c) Paragraph 3 - Acknowledged - agree.

Action: In the Phase II Work Plan, Figures 4-1 and 4-2 will be replaced with better-quality copies. (Pages 4-2 and 4-3)

Commenting Organization: U.S. EPA Commentor: Saric
Section #: Figure 4-2 Page #: 4-3 Line #: NA Code:
Original Comment #: 16

Comment: This figure shows the pilot plant process flow diagram for the solids dewatering and vitrification processes. This figure does not show "Flow No. 1, Silo 4 material (surrogate)." In addition, the figure shows neither where the blowdown from the cooling tower will be discharged nor does it address the aerial dispersion of cooling tower draft, which may contain some degree of radioactivity during Phase II testing. Finally, it is not clear why two sets of operating data such as solids flow rates, water flow rates, and operating times are presented for recycle water and thickener overflow. These deficiencies and questions should be addressed in the revised work plan.

Response: Flow No. 1 for Silo 4 material will be added to the PFD in the Phase II Work Plan. The blowdown from the cooling towers is drained into the building sump for disposal through the site

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s changed by adjusting the throughput of the furnace. After a base throughput s proven, the rate will be increased until a limit is found, i.e., maximum mum retention time. The limiting parameter can not be identified until the . For example, with the furnace operating at 1000 kg/day, approximately 60% will be in use. The rate would then be increased to say 1200 kg/day and the ould then be observed.

3. EPA Commentor: Saric
-11 Line #: NA Code:

s "checkout activities" to be performed on pilot plant equipment prior to on mentions treatment chemicals for the cooling tower and water and glass mulated waste solids slurry mixture. The quantity and quality of these ves should also be included in Section 5.0, Equipment and Materials.

for the cooling tower water are: 1) phosphate solution, 2) calcium sulfate lorine. These are standard water treatment chemicals. Glass additives for will be included in Section 1.4.3.

evised to include this information.

2. EPA Commentor: Saric
-13 and 4-14 Line #: NA Code:

ses pilot plant testing of the vitrification furnace. The text refers to the term m" when discussing testing of the furnace's operation. The term "heavy metal rified.

ng conditions, metallic lead and other heavy metals may settle to the bottom al within the furnace. Molten material at the furnace bottom will be drained n evaluated for the presence of metallic inclusions. The formation of metals om the vitrification process because the glass formulations are designed to onditions in the furnace. This activity is to monitor for and to confirm the

2. EPA Commentor: Saric
A Line #: NA Code:

e equipment and materials that will be used during the performance of the e work plan, however, does not include the following items: quantity and additives and treatment chemicals), reagent grades and concentrations, or instrumentation, and equipment manufacturers and model numbers. These e corrected in the revised work plan.

ried here apply to Phase II. The grade will be commercially available nsistent with the needs for remediation processing.

Action: Additives and treatment chemicals are included in the Phase II Work Plan, Section 4.4.2. Equipment and instrumentation for the pilot plant has yet to be purchased and will be competitively bid. Therefore, the requested data is not available at the current time.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 6.0 Page #: NA Line #: NA Code:
Original Comment #: 23
Comment: This section briefly discusses engineering-related and treatability study-related sampling and analysis. The main body of this section should focus on the treatability study sampling and analysis. Engineering-related sampling and analysis should be appended. Also, this section does not describe sampling objectives, locations, or frequencies; sample designation; sampling equipment and procedures; or sample handling and analysis. Moreover, the text makes only a brief reference to quality assurance/quality control requirements, which are presented in Table 3-1. If the SCQ is to be used for the treatability study, applicable sections of that document should be revised so that a project-specific quality assurance project plan (QAPP) is available for the treatability study. The revised SCQ or project-specific QAPP should be either incorporated into the body of the work plan or appended. Section 3.6 of U.S. EPA's 1992 guidance for conducting treatability studies discusses sampling and analysis plans and QAPPs, and cites additional references for guidance. Section 6.0 of the work plan should be completely revised to correct these deficiencies.

Response: Sampling objectives, locations, frequencies, etc. have been expanded for the Phase II Work Plan, Section 6.0. Quality requirements have been expanded in the Phase II Work Plan, Section 3.0 The SCQ is the governing document for treatability QA. Previous USEPA direction stated that previously approved documents are to be referenced not restated in the work plans. Clarification is needed from USEPA on the issue of repeating text from prior-approved documents.

Action: Expanded sections are included in the Phase II Work Plan to address these points.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 7.0 Page #: 7-1 Line #: NA Code:
Original Comment #: 24
Comment: This section discusses data management related to the treatability study. The text states that data and records will be managed in accordance with several cited documents, including the SCQ. In addition, some of the text refers to "applicable sections" of the cited documents while other text states that if one of two cited documents is not applicable, then another applies. This type of narrative indicates that a project-specific set of data collection forms and data management procedures have not been prepared. This section of the work plan should be revised to clearly describe the project-specific data collection and management forms and procedures that will be implemented during the treatability study. If existing documents such as the SCQ will be used, then the applicable sections should be either incorporated directly into the work plan or should be included in an appendix.

Response: See General Comment Response #4.

Action: None.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 8.0 Page #: 8-1 Line #: NA Code:
Original Comment #: 25
Comment: This section briefly discusses data analysis and interpretation. According to the work plan, only ASL C data will undergo data validation using "FEMP Data Validation program requirements."

These requirements should be tailored specifically for the treatability study and should either be incorporated into the main text of the work plan or should be included in an appendix. In addition, these requirements should also discuss what corrective action will be implemented if quality assurance goals are not met. Moreover, this section does not discuss how data will be summarized or how statistically significant differences between two or more parameter values will be determined. These deficiencies should be addressed in the revised work plan.

Response: a) FEMP Data Validation reports are documents that have been previously approved. Prior USEPA direction stated that previously-approved documents are to be referenced not restated in the work plan.

b) If quality assurance goals are not met, additional samples will be taken and sent to an off-site lab for further analysis.

c) The data and difference between the parameters will be evaluated as a whole to decide on the best formulation.

Action: None.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 9.0 Page #: 9-1 Line #: NA Code:
Original Comment #: 26
Comment: This section discusses the health and safety plan (HSP) for the treatability study. The text states that a general HSP is being developed for all OU4 activities and that project-specific HSPs will be developed for Phase I activities as addendums to the general HSP, as specific activities dictate. The treatability study HSP should have already been prepared and included in this work plan. If the treatability study HSP will not be included in the revised work plan, then the revised work plan should, at a minimum, identify the general treatability study activities and associated hazards that will be covered in the HSP when it is finalized, as well as the level of personal protection (A, b, C, or D) required for each treatability study activity, decontamination procedures, and emergency procedures.

Response: The General HSP for OU4 operations has been approved and will be referenced. The project-specific HSP will be prepared and approved prior to the start of operation. Prior USEPA direction has been to not submit HSP documents for review.

Action: The approved General HASP for OU4 operation will be referenced.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 10.0 Page #: NA Line #: NA Code:
Original Comment #: 27
Comment: This section discusses management of residuals generated as part of the treatability study and generally addresses most of the issues presented in U.S. EPA's 1992 treatability study guidance document. The text refers to specific operating procedures for characterizing treatability study waste streams. These procedures should be incorporated directly into the work plan or should be included in an appendix. In addition, an estimate of the amount of each treatability study waste should be included in the work plan.

Response: See General Comment Response #4.

Action: None.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 13.0 Page #: NA Line #: NA Code:
Original Comment #: 28

Comment: This subsection presents the master schedule of activities and milestones for OU4. This schedule shows that the Phase II work plan was to have been submitted on February 24, 1994. This schedule should be updated and corrected, as necessary.

Response: The schedule presented in the Phase I Work Plan is the project baseline schedule. Baseline schedule revisions are justified only by programmatic changes and are governed by established change request and approval procedures. To respond to this concern, the baseline schedule will be replaced with a "Current Schedule."

Action: The Phase II Work Plan will include a statused, "Current Schedule."

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 14.2 Page #: 14-4 Line #: NA Code:
Original Comment #: 29

Comment: This subsection discusses project staffing for the treatability study and includes an organizational chart for the pilot-scale treatability study. However, the text only discusses the roles of some of the departments shown on the organizational chart. The revised work plan should describe the roles and responsibilities of all key individual staff members associated with every department and office participating in the treatability study.

Response: Within FERMCO, the CRU4 Director is the person that is responsible for the project. Personnel from other FERMCO divisions are matrixed to the CRU4 organization to provide the expertise and support required to successfully complete the project. This section will be revised for the Phase II Work Plan.

Action: The Phase II Work Plan will include a CRU4 organization chart and describe roles and responsibilities. (Section 14.0)